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The Market for U.S. Cotton in the Republic of Korea

THE MARKET FOR U.S. COTTON IN THE REPUBLIC OF KOREA

By

Robert B. Evans[1]

Summary and Conclusions

In the 5 years ending July 1978, the Republic of Korea (South Korea) was the most rapidly expanding market for cotton in the world. Cotton imports rose from 484,000 bales in 1972/73 to 1,312,000 in 1977/78, and will likely approximate this figure again in 1978/79 (unless otherwise indicated, bales are 480 lb net). South Korea in 1978/79 ranks third, after Japan and the People's Republic of China, as an importer of cotton.

South Korea is unique as a major importer in that it purchases all but 2 to 5 percent of its cotton requirements annually from the United States. In 1977/78 it was the largest single export market for U.S. cotton, taking 1,231,000 bales, or one of every 4.4 cotton bales that the United States exported. Cotton sales to South Korea alone made a positive contribution of $352.4 million to the U.S. balance of payments that year.

Most of the cotton imported by South Korea during earlier years was financed under U.S. Government programs. Commodity Credit Corporation (CCC) credit has been the principal means since 1970/71 and Korea has never defaulted on these 3-year commercial credits. Several hundred thousand bales annually are now being paid for directly with Korean foreign exchange.

South Korea typically purchases U.S. cotton of average and longer staple length. U.S. sales consist mostly of Deltapine cotton from Arizona and the Imperial Valley of California, although there is some Acala cotton from the San Joaquin Valley in California and a considerable volume of shorter staple cotton from west Texas and Oklahoma. The cotton is mostly exported from Los Angeles and San Francisco.

South Korea probably can produce cotton textiles at a lower cost than any other country in the world. Its rapidly expanding textile industry is characterized by large units of new machinery working at full capacity, and efficient labor working at relatively low wage rates.

Only about one-fourth of South Korea's mill consumption of cotton goes into products for domestic consumption. The quantity of cotton used for this purpose remained stationary at about 285,000 bales annually from 1970 to 1977. There was a substantial increase, however, in the first half of 1978 because of general prosperity, rising per capita incomes, and changes in Government policies that may have previously favored domestically made synthetics.

Cotton's proportion of the aggregate domestic market for both cotton and manmade fibers in South Korea is estimated to have fallen from 72 percent in 1965 to 28 percent in 1977, but to have recovered to 34 percent in the first half of 1978. Per capita consumption of cotton was 1.8 kilograms during 1970-72 and 1.9 in 1976-78. Per capita consumption of manmade fibers rose from 2.2 to 4.1 during the same period.

An estimated 74 percent of South Korea's cotton consumption went into export products in 1977. Consumption of cotton going into exported textiles rose from 84,000 bales in 1965 to 796,000 in 1977 and was running at the annual rate of 863,000 bales in the first half of 1978.

South Korea is primarily an exporter of cotton goods in process that require further manufacture elsewhere. Yarn—accounting for nearly half of the exports of cotton manufactures—goes almost entirely to Hong Kong and Japan. Fabrics account for 46 percent, with Western Europe taking most of the volume, although significant exports also go to Hong Kong, Japan, and the United States. Within this category goods that are mostly synthetic but part

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TABLE 1.–PRODUCTION, IMPORTS, CONSUMPTION, AND ENDING STOCKS OF COTTON IN THE REPUBLIC OF KOREA
CROP YEARS BEGINNING AUGUST 1, 1947-78

(1,000 bales of 480 lb net)

Crop year beginning August 1	Production	Imports	Consumption	Ending stocks
1947	64	65	125	38
1948	72	50	135	24
1949	130	52	190	14
1950	85	36	115	10
1951	104	55	140	19
1952	66	35	110	10
1953	65	90	130	35
1954	65	170	220	50
1955	90	117	232	25
1956	75	217	265	50
1957	40	210	265	35
1958	35	225	270	25
1959	38	275	280	55
1960	30	216	270	30
1961	42	254	260	65
1962	27	324	350	60
1963	18	270	330	18
1964	19	316	310	40
1965	17	327	340	44
1966	20	362	375	50
1967	18	404	420	50
1968	20	450	450	70
1969	20	470	480	80
1970	21	557	550	108
1971	19	523	540	110
1972	18	484	540	72
1973	19	788	765	112
1974	17	722	744	107
1975	16	1,013	913	223
1976	10	909	951	191
1977	9	1,312	1,156	356
1978 (est.)	12	1,300	1,275	393

Source: FAS Tobacco and Cotton Division, CP

cotton are now more important quantitywise than all cotton goods. Made-up goods comprise only 5 percent of cotton product exports, with the United States, the European Community, and Japan the leading destinations.

Only 4 percent of U.S. imports of cotton manufactures come directly from South Korea, although undoubtedly additional quantities were further processed in Hong Kong, Japan, and elsewhere before arriving in the United States. Manmade fiber manufactures are much more important than all cotton products in South Korea's direct export trade with the United States. In 1977/78, around 13 percent of U.S. imports of these products were from South Korea.

Only 6 percent of cotton yarn exported by the world's major exporting countries originated in 1976 in South Korea, and only 3 percent of the fabric. Thus, South Korea with its highly efficient industry should have considerable scope for further expansion. Its competitive situation in the world textile market has been improved greatly by the rising value of the Japanese yen, which has placed Japanese export textiles at a competitive disadvantage.

South Korea's textile exports to nearly all developed countries are subject to quotas that allow a moderate year-to-year expansion. Exports to many other countries are held down by foreign exchange restrictions, state trading, tariff barriers, subsidies to local industry, and other measures to discourage

textile imports. It is Korean policy to diversify and upgrade the quality of its textile exports and to expand its markets in many additional countries.

Although Korea's labor costs are still low, compared with many other major textile-producing countries, they are rising as the country's labor force becomes more fully utilized and trained for more and more technically sophisticated operations. Average earnings by textile and apparel workers grew 28 percent in 1977 and 21 percent in the first half of 1978. Textile unions were demanding a 50-percent increase in 1979. A principal concern in South Korea is rising competition from the People's Republic of China.

Unquestionably of great benefit to U.S. cotton farmers, ginners, merchants, and cooperatives is the near monopoly enjoyed by the United States in South Korea's larger and expanding import market for cotton, combined with South Korea's ability to process cotton into textiles at low cost for export to countries where very little U.S. raw cotton now is sold.

Production

In 1949 and again in 1951, the Republic of Korea grew over 100,000 bales of cotton, but since then, production has declined and only 9,000 bales were grown in 1977. This cotton is of poor quality and is used by farmers for their own consumption rather than for commercial spinning.

Imports

In 1977/78, the Republic of Korea was the world's third largest importer of cotton from all sources, surpassed only by Japan and the People's Republic of

TABLE 2.–IMPORTS OF COTTON INTO REPUBLIC OF KOREA BY COUNTRIES OF ORIGIN
YEARS BEGINNING AUGUST 1, 1969-77

(1,000 bales of 480 lb net)

Country of origin	1969	1970	1971	1972	1973	1974	1975	1976	1977
United States	456.8	540.4	508.5	475.3	745.6	705.2	991.3	875.2	1,271.1
Mexico	0.6	1.6	0.1	0.3	–	–	1.3	2.0	7.8
El Salvador	–	.3	.5	1.4	3.4	–	.3	–	–
Guatemala	–	–	–	–	–	.5	–	–	–
Honduras	–	–	–	–	–	–	–	.5	–
Nicaragua	.1	.3	.8	.1	–	–	1.4	–	–
Subtotal	.7	2.2	1.4	1.8	3.4	.5	3.0	2.5	7.8
Argentina	–	–	–	–	–	–	2.7	–	–
Bolivia	–	–	–	–	–	–	1.3	–	–
Brazil	–	1.0	.3	.6	1.9	2.1	4.4	–	3.1
Colombia	–	–	–	–	.2	.1	–	–	.4
Paraguay	–	–	–	–	–	–	.2	–	–
Peru	–	–	–	–	.4	–	–	.9	.1
Subtotal	0	1.0	.3	.6	2.5	2.2	8.6	.9	3.6
Australia	–	–	–	–	1.2	–	–	–	–
Egypt	–	1.0	3.1	1.9	7.4	1.8	3.0	7.5	6.3
Sudan	–	–	.1	.4	.7	.6	2.9	3.3	6.9
Syria	–	–	–	–	.4	–	–	–	–
Tanzania	–	–	.2	–	–	–	–	–	–
Turkey	–	–	–	–	–	–	–	–	–
All Other	7.2	12.0	9.7	4.3	26.5	11.7	.4	19.6	16.7
Subtotal	7.2	13.0	13.1	6.6	36.2	14.1	10.3	30.4	29.9
Total	464.7	556.6	523.3	484.3	787.7	722.0	1,013.2	909.0	1,312.4
U.S. Percent of Total	98	97	97	98	95	98	98	96	97

Source: Monthly Foreign Trade Statistics, Office of Customs Administration, Republic of Korea.

China. Annual imports exceeded 100,000 bales for the first time in 1954/55, exceeded 500,000 bales in 1970/71, and passed the 1.0-million-bale mark in 1975/76. In 1977/78, imports totaled over 1.3 million bales (table 2). South Korea is now a larger market for raw cotton than such countries as France, West Germany, and the United Kingdom.

A Leading Export Market for U.S. Cotton

Japan for many years was the leading export market for U.S. cotton, but now may be surpassed in this position by the Republic of Korea. U.S. cotton exports to South Korea moved ahead of shipments to Japan for the first time in 1975/76 and again in 1977/78. In the three cotton seasons ending July 31, 1978, 1 of every 4.4 cotton bales exported by the United States went to South Korea (table 3). In 1978/79, August 1 through July 22, U.S. exports plus outstanding sales of Upland cotton to Japan of 1,496,500 running bales, however, were ahead of sales to the Republic of Korea of 1,411,700 bales.

U.S. cotton exports to South Korea doubled from an average of 614,000 bales during 1970/71-74/75 to 1,231,000 bales in 1977/78. This was by far the largest gain to any country. Cotton exports to South Korea, therefore, make a considerable contribution to the U.S. balance of payments. During 1977/78 they were valued at $352.4 million.

Prospective U.S. Exports. It is expected that 1979/80 will be another good year for U.S. cotton exports to South Korea. From August 1, 1978 through July 22, 1979, the United States already had sold 545,000 running bales of Upland cotton for delivery in 1979/80, compared with 536,700 to Japan and 2,475,800 to all countries.

The Korean Government estimated its cotton import requirements at 1.2 million bales for calendar 1978, 1.4 million bales in 1979, and 1.5 million in 1980 and 1981.

There is no other major cotton import market in which U.S. cotton has so preponderant a share as South Korea. All but 2 to 5 percent of its imports of cotton have come from the United States in recent years. Imports from all other countries averaged only 31,000 bales annually from 1973/74 through 1977/78. A few thousand bales were imported annually from Egypt and the Sudan, probably longer staple cottons for special uses. Much of the remainder was from various countries in Latin America.

Key Factors in U.S. Cotton Sales

Financing. U.S. financing has been a principal reason for U.S. predominance in the South Korean market. In the 1950's, practically all U.S. cotton imported by South Korea was financed under mutual security—which ended in 1961/62—or Title I, Public Law 480. Financing under Title I, Public Law 480 was the principal means from then until 1970/71, continuing as an important factor in 1971/72 and 1972/73. Since then, only relatively small quantities have been financed by this means—in 1975/76 and 1976/77 (tables 4 and 5).

Financing under CCC loans began in 1963/64 and has been the most important means of U.S. Government financing since 1970/71. A $50.2 million line to finance approximately 145,000 running bales, announced January 5, 1979, is the most recent in a series of loans. Financing under barter programs took place from 1963/64 to 1972/73, but exceeded 50,000 bales in only 3 fiscal years.

TABLE 3.—EXPORTS OF COTTON FROM THE UNITED STATES TO REPUBLIC OF KOREA AND TO ALL COUNTRIES, 1970-78

Year beginning August 1	Korea, Republic of	All destinations	Percent Korea of total
	1,000 480 lb bales		*Percent*
1970-74 av	614	4,528	14
1975	939	3,311	28
1976	959	4,784	20
1977	1,231	5,484	22
1978[1]	1,541	6,207	25

[1] Exports plus outstanding sales, August 1, 1978 through March 18, 1979.

Source: U.S. Bureau of the Census.

TABLE 4.–U.S. EXPORTS OF COTTON TO THE REPUBLIC OF KOREA UNDER VARIOUS FINANCING PROGRAMS

(1,000 running bales)

Fiscal year[2]	U.S. financing programs							Other financing[4]	Total exports[5]
	Public Law 480[1]			CCC credit[3]	Barter[1]	Mutual security (ICA)[1]	Total designated programs		
	Title I		Title II						
	Local currency	Convertible currency							
1954/55	–	–	–	–	–	168	168	6	174
1955/56	56	–	–	–	–	61	117	0	117
1956/57	–	–	(6)	–	–	200	200	0	200
1957/58	3	–	–	–	–	202	205	0	205
1958/59	–	–	–	–	3	216	219	9	228
1959/60	70	–	–	–	(6)	198	268	1	269
1960/61	70	–	16	–	–	104	190	0	190
1961/62	234	–	–	–	–	1	235	15	250
1962/63	267	–	–	–	–	–	267	14	281
1963/64	229	–	–	10	17	–	256	16	272
1964/65	243	–	–	(6)	18	–	261	31	292
1965/66	235	–	–	3	56	–	294	28	322
1966/67	260	–	–	28	31	–	319	22	341
1967/68	290	–	–	48	15	–	353	2	355
1968/69	368	–	–	89	4	–	461	4	465
1969/70	244	–	–	188	16	–	448	(4)	436
1970/71	163	–	–	230	108	–	501	(4)	496
1971/72	17	65	–	246	96	–	424	62	486
1972/73	–	175	–	293	14	–	482	54	536
1973/74	7	–	–	270	–	–	277	464	741
1974/75	–	–	–	200	–	–	200	341	541
1975/76	–	55	–	808	–	–	863	216	1,079
1976/77	–	28	–	217	–	–	245	439	684
1977/78	–	–	–	684	–	–	684	581	1,265

[1] Based on bills of lading. [2] July 1 - June 30, 1954/55 to 1974/75; July 1, 1975 - September 30, 1976; October 1 - September 30, 1976/77 and thereafter. [3] Based on disbursements to U.S. exporters. [4] Total exports as reported by the Bureau of the Census less total of designated programs. Because of different sources of data, timing, etc. there are discrepancies. [5] As reported by Bureau of the Census. [6] Less than 500 bales.

Source: FAS Tobacco and Cotton Division, CP, and U.S. Bureau of the Census.

TABLE 5.–IMPORTS OF COTTON INTO THE REPUBLIC OF KOREA ACCORDING TO METHODS OF FINANCING[1]

Calendar year	P. L. 480		CCC credit		Korean foreign exchange		Total	
	1,000 bales	*Million dollars*	*1,000 bales*	*Million dollars*	*1,000 bales*	*Million dollars*	*1,000 bales*	*Million dollars*
1967	340	38.4	50	6.6	–	–	390	45.0
1968	334	38.0	60	8.2	–	–	394	46.2
1969	160	20.0	120	–	–	–	280	36.5
1970	160	18.4	158	25.0	70	9.0	388	52.4
1971	150	19.6	310	50.0	75	11.2	535	80.8
1972	150	24.0	300	60.0	85	15.0	535	99.0
1973	35	5.7	325	65.0	205	64.9	565	135.6
1974	–	–	140	50.0	367	131.2	507	181.2
1975	–	–	441	125.0	327	107.0	768	232.0
1976	56	17.5	573	175.0	411	149.5	1,040	342.0
1977	28	10.1	434	[2] 140.0	543	213.5	1,005	363.6
1978	–	–	693	[3] 225.0	538	181.0	1,230	406.0
1979 (plan)	40	13.7	616	[4] 200.2	644	208.8	1,300	422.7
1980 (plan)	40	13.7	615	200.0	845	273.8	1,500	487.5

[1] Based on fund allocation schedule and plans of Republic of Korea. [2] Exclusive of an additional $100 million granted by USDA December 9, 1977. Allocations to individual mills were made in February 1978. [3] Includes $100 million granted December 9, 1977 and $125 million granted on March 31, 1978 by USDA. [4] $98 million of $125 million had been used by December 31, 1978.

Source: As indicated in above footnotes.

Financing under Title I, Public Law 480 was at relatively low interest rates, with long periods of repayment–at first in local currency, but beginning in 1971/72 usually in convertible currency. The 1975 and 1976 Title-I agreements called for no payments in the first 10 years and then repayment in 31 annual installments at interest rates of 2 and 3 percent. Cotton financed under Public Law 480 provided Korea with counterpart funds for irrigation, highway, power, and other projects and, of course, contributed to Korea's budgetary stability. Cotton so financed could be used only in making textiles for domestic consumption and not for export.

CCC loans have been repayable in dollars in annual repayments over 3 years. The interest rate being applied on loans in late November 1978 was 10.5 percent if guaranteed by a U.S. bank, or 11.5 percent if guaranteed by a Korean bank. Cotton mills purchasing U.S. cotton under such loans have enjoyed the benefit of the 3-year term for repayment and the relatively low interest rate.

In all, financing of U.S. cotton exports to South Korea under U.S. official programs escalated from around 200,000 bales annually in the mid-1950's to over half a million bales in some years in the 1970's.

Private financing of U.S. cotton shipments to South Korea was very limited until the early 1970's, but now is used for exports of several hundred thousand bales annually to that country. Korean mills pay for this volume with Korean foreign exchange funds.

The Government of Korea has expressed its desire to continue Public Law 480 and CCC credit financing in 1979, and to continue to purchase its cotton requirements largely from the United States.

In certain other importing countries, purchases of cotton are sometimes part of an arrangement in which the cotton exporting country accepts manufactured products from the importing country in return for the cotton. Such deals may disadvantage the United States, where preferred entry of a country's products is not tied to U.S. cotton sales. In South Korea, financial and other advantages of purchasing U.S. cotton appear to outweigh possible advantages of purchasing cotton elsewhere. Because the Republic of Korea has no diplomatic relations with the Soviet Union, no Soviet cotton is purchased although it is an important factor in some other east Asian countries.

Dependability and Market Promotion

Over the years a good relationship has developed between the cotton spinners in the Republic of Korea and the cotton merchants, cooperatives, and cotton organizations in the United States. Several Korean

mills had financial problems in the textile recession of 1974/75, but the United States provided additional financial assistance and there were no defaults. Cotton trade between the two countries appears to have operated well with regard to delivery according to specifications, timing, and so forth. Korean mills generally consider U.S. cotton shippers to be highly dependable.

Cotton Council International (CCI) has a cooperative cotton promotion program with the Spinners and Weavers Association of Korea to promote use of U.S. cotton in Korea. In addition, it brings Korean spinner representatives to the United States for cotton orientation tours and sends U.S. trade teams to Korea. These programs are conducted under a cooperative market development arrangement between CCI and the U.S. Department of Agriculture.

U.S. cotton growing areas have the advantage of being comparatively close to South Korean mills, compared with other major cotton-exporting areas in the world, even though the shipping distance is several thousand miles. Availability in the United States of large quantities of the various staple lengths also strengthens the U.S. position in this market.

Although precise figures are not available, it appears that most South Korean cotton purchased consists of Acala cotton from the San Joaquin Valley in California and Deltapine cotton from the Imperial Valley of California and Arizona. A considerable volume of shorter staple cotton comes from west Texas and Oklahoma, but probably not very much from the Delta. The latter moves primarily to U.S. mills in the Carolinas, Georgia, and Alabama.

Most U.S. cotton destined for South Korea is exported through the ports of Los Angeles and San Francisco, although a considerable volume moves through Galveston and Houston (table 6).

How Korean Mills Purchase U.S. Cotton

South Korean mills usually purchase their U.S. cotton through Korean agents of U.S. cotton shippers and cooperatives. One or two mills may purchase directly. Most cotton is bought on the basis of private types supplied by the shippers although a substantial business is done on the basis of the USDA official classification (green card). Cotton is usually purchased f.o.b. U.S. ports, with Korean mills specifying the ship.

Staple Lengths Purchased. The bulk of cotton bought by South Korean mills is American Upland. Two sets of statistics on U.S. exports collected by the Bureau of the Census and the Office of the General Sales Manager, USDA, indicate that in the four cotton seasons 1973/74-1977/78 around 8 percent of the Upland cotton exported to South Korea was 1-1/18" and longer in staple length. Another 45 percent was 1-3/32"; 33 percent, 1" to 1-1/16"; and 14 percent under 1" (tables 7 and 8).

U.S. export statistics indicate the export of 1,700 bales of American Pima cotton to the Republic of South Korea in 1973/74, none in 1974/75, 1,300 bales in 1975/76, and 2,400 bales in 1977/78. This cotton staple is 1-3/8" and longer. Some of the cotton purchased by South Korea from Egypt and the Sudan may also be in the extra-long staple category, but these purchases are limited to a few

TABLE 6.–EXPORTS OF U.S. COTTON TO REPUBLIC OF KOREA BY CUSTOMS DISTRICTS YEARS BEGINNING AUGUST 1, AVERAGE 1969-73, ANNUALLY 1974-77

(1,000 bales of 480 lb net)

Customs District	1969-73 average	1974	1975	1976	1977
Mobile	(1)	25	11	0	0
New Orleans	55	48	27	28	11
Galveston	346	204	270	244	123
Houston	35	12	17	54	77
San Diego	10	(2)	(2)	(2)	(2)
Los Angeles	97	262	353	388	612
San Francisco	30	110	239	233	399
Other	2	1	22	12	9
Total	575	662	939	959	1,231

[1] Less than 500 bales. [2] Included in other if any.

Source: Compiled from official records of the Bureau of the Census.

TABLE 7.–EXPORTS OF U.S. COTTON TO REPUBLIC OF KOREA, BY VARIETIES AND STAPLE LENGTHS
YEARS BEGINNING AUGUST 1, 1973-77

Variety and staple length (32nds of an inch)	1973	1974	1975	1976	1977
	1,000 bales (480 lb net)				
Pima	1.7	0	1.3	0	2.4
Upland:					
36 and over	58.6	52.4	60.1	67.1	119.6
32-35	635.6	526.4	749.7	750.4	968.6
Under 32	76.3	83.0	127.6	141.0	140.4
Total	772.2	661.8	938.7	958.5	1,231.0
	Percent				
Pima	0.2	0	0.1	0	0.2
Upland:					
36 and over	7.6	7.9	6.4	7.0	9.7
32-35	82.3	79.6	79.9	78.3	78.7
Under 32	9.9	12.5	13.6	14.7	11.4
Total	100.0	100.0	100.0	100.0	100.0

Source: Compiled from Bureau of the Census records. These data may vary because of timing and other reasons from data compiled by the General Sales Manager, Department of Agriculture.

TABLE 8.–EXPORTS OF UPLAND U.S. COTTON TO REPUBLIC OF KOREA BY STAPLE LENGTHS
YEARS BEGINNING AUGUST 1, 1974-77

Staple lengths (32nds of an inch)	1974	1975	1976	1977
	1,000 bales (480 lb net)			
Over 34	33.17	484.1	472.9	699.1
32-34	196.9	310.4	318.2	385.9
Under 32	88.0	120.1	141.4	181.5
Total	616.6	914.6	932.5	1,266.5
	Percent			
Over 34	53.8	52.9	50.7	55.2
32-34	31.9	34.0	34.1	30.5
Under 32	14.3	13.1	15.2	14.3
Total	100.0	100.0	100.0	100.0

Source: These data were submitted by exporters to USDA, OGSM and may differ somewhat from U.S. Bureau of the Census data.

thousand bales annually at most. Such statistics indicate that South Korea typically purchased U.S. cotton of average and longer staple length.

Consumption

The Textile Industry

The textile industry of the Republic of Korea–and its ability to process cotton–has been expanding in the last few years at what must be one of the most rapid rates that has ever occurred anywhere. The number of cotton system spindles rose from 902,000 in 1970 to 2,598,000 in December 1978, and was expected to rise to 3,187,000 by the end of 1979. Reportedly this number would grow to 3,508,200 when capacity under construction in 1978 was completed.[2] Similarly, the number of cotton-weaving looms rose from 40,838 in 1975 to 58,423 in June 1978, and was projected to expand further to 71,590 in 1980 (table 9). Also, large increases in the number of knitting machines and sewing machines were taking place. The industry is taking full advantage of the economies of large-scale operations to offset rising wage levels.

Korea's fourth Five-Year Plan for 1977-81 implies that less emphasis may be given to textiles in the future. It states: "In view of the constraints placed on

[2] *Japan Textile News,* November 1978, page 28.

TABLE 9.–INSTALLATION AND OPERATION OF SPINDLES AND LOOMS, EMPLOYMENT AND PRODUCTION PER WORKER IN MILLS THAT ARE MEMBERS OF THE SPINNERS AND WEAVERS ASSOCIATION OF KOREA

Calendar year and month	Spindles				Looms			Employment	Production per worker	
	In place	Operating			In place	Operating	Percent of in place			
		On cotton	On all fibers	Percent of in place						
	1,000	*1,000*	*1,000*	*Percent*	*Number*	*Number*	*Percent*	*Number*	*Kg*	*Meters*
Annual										
1970	901.7	680.0	816.3	92.5	10,083	9,174	91.9	27,532	26.5	89.9
1971	961.9	717.0	890.1	93.0	11,314	8,975	83.9	26,250	31.0	108.8
1972	1,009.6	642.7	923.5	94.5	11,317	9,490	84.0	24,491	33.3	119.5
1973	1,307.1	763.2	1,091.8	95.4	14,102	10,482	79.2	28,317	32.2	132.2
1974	1,540.0	1,004.2	1,292.5	88.6	14,577	9,933	70.6	31,478	30.4	133.1
1975	1,939.7	1,169.5	1,157.0	89.6	16,477	12,974	84.3	32,084	35.8	162.8
1976	2,090.7	1,137.6	1,862.0	95.2	17,078	15,737	92.2	41,584	37.1	163.2
1977	2,428.0	1,220.0	2,176.5	96.3	17,669	17,293	95.7	44,846	37.6	162.7
Stated month										
1977, July	2,263.6	1,227.4	2,156.5	95.2	17,983	17,108	95.1	44,951	36.8	166.7
1977, October	2,381.0	1,265.8	2,278.8	95.7	18,936	18,941	95.3	47,427	38.1	157.2
1978, January	2,478.1	1,299.2	2,388.8	96.4	19,866	18,468	93.0	48,118	35.8	163.2
	2,529.7	1,336.4	2,472.0	97.7	20,460	19,031	93.0	48,398	38.5	166.0
1978, July	2,548.3	1,349.9	2,484.4	97.5	20,448	19,376	94.8	47,863	40.3	170.7

Source: Monthly reports of Spinners and Weavers Association of Korea.

industrial-sector plans by limited savings mobilization, poor resource endowments, and steadily increasing employable population, emphasis will be placed on skilled-labor-intensive industries such as machinery, electronics, and shipbuilding. . ." "Capital intensive industries such as iron and steel, nonferrous metals and petrochemicals will be established on scales large enough to ensure international competitiveness. On the other hand, the international competitiveness of light industry will be strengthened through product diversification and quality improvement."[3]

However, a recent newspaper article noted some disappointment with heavy industry and the possibility that Korea might concentrate again on textile expansion.[4] The cotton textile industry in 1978 was swamped with orders after a slowdown in the fourth quarter of 1977. This was in part because of improvement in Korea's competitive position in world markets following appreciation of the Japanese yen and devaluation of the dollar. South Korea was reported to be filling the vacuum created by the withdrawal of Japanese mills in certain areas of yarn and fabric markets in Asia. A principal fear was that eventually China would provide strong competition for low-quality products.

It was reported in the spring of 1979 that the textile industry was enjoying an unusual export boom as well as strong domestic demand. Also reported was Korea's decision to abolish ceilings on expansion of facilities in the textile industry so as to be better able to compete in world markets.

Korea may now be capable of producing cotton textiles at the lowest cost in the world. Its machinery is new and, unlike the situation in some other countries, it is concentrated in large-scale plants. Nevertheless, the industry fears that Government measures requiring use of domestically made machinery might interfere with the industry's ability to turn out textiles at a competitive cost. In April 1979, the 21 mills belonging to the Spinners and Weavers Association of Korea had an average of 135,000 spindles each, with the number ranging from 528,000 in 1 concern down to 50,000 each in 8 mills (table 10). Thus, the mills are large enough for efficient operation.

The industry works at virtually full capacity. In 1977, the average spinning mill operated 23.6 hours per day, 340 days during the year, and its spindles were operating 96.28 percent of the time. In June 1978, the ratio was 98.23 percent; in July 1978,

[3] Government of Republic of Korea; the Fourth Five-Year Economic Development Plan, 1977-81. Seoul, 1976.

[4] *Japan Textile News*, November 1978, page 28.

TABLE 10.–SPINDLES AND LOOMS IN MILLS THAT ARE MEMBERS OF THE SPINNERS AND WEAVERS ASSOCIATION OF KOREA, MARCH 29, 1979

Mills	Spindles	Looms
Kyungbang Ltd.	125,308	1,287
Dongil Textile Co., Ltd.	145,476	919
Chonbang Co., Ltd.	169,856	1,447
Taihan Textile Co., Ltd.	173,220	1,245
Choongnam Spinning Co., Ltd.	528,180	4,100
Dainong Co., Ltd.	483,400	2,595
Punghan Textiles Co., Ltd.	80,960	1,040
Ilshin Spinning Co., Ltd.	109,600	917
Pangrim Spinning Co., Ltd.	140,000	4,728
Sam Hwa Spinning Co., Ltd.	51,264	197
Hahnil Textile Co., Ltd.	53,728	416
Happdong Textile Co., Ltd.	71,280	1,113
Kukje Textile Co., Ltd.	150,800	460
Tae Hwa Spinning Co., Ltd.	100,772	1,060
Youngnam Textile Co., Ltd.	51,376	–
Hanil Synthetic Fiber Ind. Co., Ltd.	153,672	–
Taechang Enterprise Co., Ltd.	52,184	903
Tongkook Textile Co., Ltd.	52,704	1,000
Kabul Spinning & Textile Co., Ltd.	50,184	500
Taekwang Industrial Co., Ltd.	50,112	–
Ssangyoung Spinning Co., Ltd.	50,112	–
Total 21 Mills	2,844,588	23,927
In 1947	275,300	9,297

Source: Spinners and Weavers Association of Korea.

Mill Consumption

Cotton. Mill consumption of cotton in South Korea passed the 200,000-bale mark in 1956/57, 400,000 bales in 1967/68, and went over a million bales in 1975/76 for the first time. There was a drop to 909,000 bales in 1976/77, then a roaring recovery to 1.3 million bales in 1977/78. In the fall of 1978, the industry placed its cotton requirements for calendar 1979 at 1.4 million bales (table 11) and for 1980 at 1.5 million bales. South Korea now consumes more cotton at the mill level than any country in Western Europe and is the 10th largest mill consumer of cotton in the world. Of the countries depending primarily on cotton imports, it is now second only to Japan as the largest consumer.

Other Fibers

While Korean mill consumption of cotton has grown rapidly, cotton's share of mill consumption of all fibers dropped precipitously from 75.5 percent in 1965 to 37.2 percent in 1976, remaining around the latter level in 1977 and 1978. The rapid decline was associated with development of a large domestic manmade-fiber industry. The Korean Government encouraged greater use of manmade fibers for domestic offtake, no doubt on the basis that such fibers were now produced in the country, while practically all cotton had to be imported. There was also a desire to diversify and offer a wide range of products. At the same time export markets were available to which manmade-fiber products–both 100 percent and blended–could be shipped, in contradistinction to import restrictions on cotton products imposed by a number of countries.

Consumption of synthetic fibers tripled from 1972 to 1977 and in the latter year constituted 60 percent of the fibers used. The 252,000-metric-ton gain in consumption of synthetic fibers from 1972 to 1977 compares with a gain of 111,000 tons in cotton. Wool consumption has remained around 1 percent of the total. Rayon consumption was stagnant until 1976/77, when high cotton prices caused a moderate jump, although rayon's percentage in the latter year was only 3.5 percent. Consumption of silk and linen was small: in 1976, silk yarn production was 542 tons and linen yarn production 636 tons.

Domestic Market for Cotton Textiles

Only about 25 percent of South Korea's mill consumption of cotton went into the manufacture of textiles for domestic use in 1977, compared with 71 percent in 1970. The remainder went into exported textiles.

The domestic offtake of cotton textiles appears to have been stationary from 1970 through 1977–equivalent to about 285,000 bales (62,000 tons) annually–but with considerable year-to-year fluctuations. During the first half of 1978, however, domestic offtake soared to an annual rate of 381,000 bales (83,000 tons) (tables 12 and 13). Recovery from a textile recession in the last quarter of 1977, general prosperity, and rising per capita incomes were factors in the upturn. There was also a strong demand for jeans. In July 1977 a value-added tax was imposed on all products, including textiles, but the previous tax on textiles had been higher, so the new tax actually lowered the cost of textiles to consumers below what it otherwise might have been.

Previously the domestic offtake of cotton goods may have been held back by price controls, which caused mills to divert production to more profitable exports. In August 1978 the Korean Government stopped the direct export of cotton yarn, blended yarn, and cotton cloth until adequate quantities were available to meet both domestic needs and those of manufacturers of end-use products for export.

Data on mill consumption of cotton in South Korea are from the Spinners and Weavers Association

TABLE 11.–MILL CONSUMPTION OF SPECIFIED TEXTILE FIBERS IN REPUBLIC OF KOREA, 1965, 1970-79

Calendar year	Cotton		Wool[2]	Manmade[1]			Total	Cotton	Wool	Manmade			Total
				Rayon and acetate	Synthetic	Subtotal				Rayon and acetate	Synthetic	Subtotal	
	1,000 bales		*1,000 metric tons*					*Percent*					
1965	326	71	1	10	12	22	94	75.5	1.1	10.6	12.8	23.4	100.0
1970	514	112	4	19	82	101	217	51.6	1.8	8.8	37.8	46.6	100.0
1971	547	119	4	19	97	116	239	49.8	1.7	7.9	40.6	48.5	100.0
1972	542	118	7	20	113	133	258	45.7	2.7	7.8	43.8	51.6	100.0
1973	652	142	8	19	162	181	331	42.9	2.4	5.8	48.9	54.7	100.0
1974	753	164	5	18	176	194	363	45.2	1.4	4.9	48.5	53.4	100.0
1975	827	180	7	17	255	272	452	39.8	1.5	3.7	56.4	60.2	100.0
1976	932	203	12	25	317	342	546	37.2	2.2	4.6	58.0	62.6	100.0
1977	1,051	229	13	36	369	385	614	37.3	2.1	5.9	60.1	62.7	100.0
1978	Est. 1,217	265	14	–	–	445	710	37.3	2.0	–	–	62.7	100.0
1979	Plan 1,401	305	–	–	–	–		–	–	–	–		

[1] Available for mill consumption. From *Textile Organon* June Issues. [2] FAS records. Does not include tops. Clean Basis.

Sources: As indicated in above footnotes.

TABLE 12.–ESTIMATED DOMESTIC CONSUMPTION OF COTTON AND MANMADE FIBERS IN REPUBLIC OF KOREA, TOTAL AND PER CAPITA[1]

Calendar year	Total			Per capita			Population[3]	Cotton's share
	Cotton	Manmade[2]	Total	Cotton	Manmade	Total		
	1,000 bales	*1,000 MT*	*1,000 MT*	*1,000 MT*	*kg*	*kg*	*kg*	*Millions*	*Percent*
1965	244.3	53.2	18.3	71.5	1.88	0.64	2.52	28.38	74.6
1970	346.3	75.4	75.0	150.4	2.34	2.33	4.67	32.24	50.1
1971	275.6	60.0	75.6	135.6	1.82	2.30	4.12	32.88	44.2
1972	194.3	42.3	68.0	110.3	1.26	2.03	3.29	33.51	38.3
1973	282.9	61.6	39.8	101.4	1.81	1.17	2.98	34.10	60.7
1974	312.8	68.1	71.7	139.8	1.96	2.07	4.03	34.69	48.6
1975	305.4	66.5	109.0	175.5	1.88	3.09	4.97	35.28	37.8
1976	283.4	61.7	132.0	193.7	1.72	3.68	5.40	35.86	31.9
1977	282.9	61.6	158.7	220.3	1.69	4.36	6.05	36.44	27.9
1978[4]	381.2	83.0	160.7	243.7	2.24	4.34	6.58	37.02	34.0

[1] Domestic component of mill consumption. From *Cotton Textile Monthly*, Spinners and Weavers Association of Korea. [2] Production plus imports less exports of manmade fibers, including yarn as given in June issues of *Textile Organon* adjusted for fiber equivalents of imports and exports of fiber products. Tonnage of clothing and certain other items partly estimated. [3] UN Statistical Bulletin. [4] Estimated on basis of January-June data.

Sources: As indicated in above footnotes.

TABLE 13.–MILL CONSUMPTION OF TEXTILE FIBERS FOR DOMESTIC USE IN MILLS THAT ARE MEMBERS OF THE SPINNERS AND WEAVERS ASSOCIATION OF KOREA

Calendar year	Cotton	Rayon and acetate	Synthetic[1]	Total	Cotton	Rayon and acetate	Synthetic	Total
	Metric tons				*Percent*			
1970	75,405	4,668	2,124	82,197	91.7	5.7	2.6	100.0
1971	59,976	4,388	1,763	66,127	90.7	6.6	2.7	100.0
1972	42,253	5,561	1,748	49,562	85.3	11.2	3.5	100.0
1973	61,588	3,025	1,087	65,670	93.8	4.6	1.6	100.0
1974	68,148	2,672	2,873	73,693	92.5	3.6	3.9	100.0
1975	66,501	2,416	6,777	75,694	87.8	3.2	9.0	100.0
1976	61,728	3,496	13,203	78,427	78.7	4.5	16.8	100.0
1777	61,581	3,187	22,598	87,366	70.5	3.6	25.9	100.0
1978[2]	82,997	2,433	28,590	114,020	72.8	2.1	25.1	100.0

[1] In production of spun yarn. Does not include continuous filament yarn. [2] January-June total X 2.

Source: *Cotton Textile*, monthly of Spinners and Weavers Association of Korea.

of Korea (SWAK), which segregates its cotton mill consumption figures by whether the products made from raw cotton are for domestic use or export. This is obviously difficult to do, but a check of Korea's textile exports bears out the accuracy of the figures.

Practically all of the cotton goods used in South Korea are manufactured domestically. A small amount of cotton yarn and a moderate amount of cotton cloth are imported, but they are probably largely processed further for export.

Competition Among Fibers. While the offtake of cotton goods changed very little from 1970 to 1977, the offtake of manmade fiber textiles rose very

rapidly from 75,000 metric tons in 1970 to 220,000 tons in 1977 on a raw fiber basis. Cotton's share of the total for the two fibers declined from 75 percent in 1965 to 28 percent in 1977, but may have recovered to 34 percent in 1978. This is on the basis of mill consumption of cotton and availability for domestic consumption of both continuous filament yarn and staple manmade fibers. On another basis—consumption of fibers on cotton system spindles—cotton's share declined from 92 percent in 1970 to 71 percent in 1977. Rayon staple's share was small and became smaller, while synthetic staple's share rose very rapidly (table 12).

Per Capita Domestic Consumption. Per capita domestic consumption of cotton and manmade fibers rose from 2.5 kilograms in 1965 to an estimated 6.6 in 1978. This compares with an average in 1974 of 3.1 kilograms for all developing countries, 14.5 in Japan, and 22.2 in the United States. Per capita domestic consumption of cotton in South Korea, however, was only around 1.8 kilograms annually during 1970-72 and 1.9 in 1976-78. This was well below the 3.1-kilogram average for all developing countries in 1974 and far below Japan's 6.3 kilograms and the United States 7.5 kilograms.

The population of South Korea rose from 33.51 millions in 1972 to 36.44 millions in 1977, an 8.5-percent gain. The population has been increasing by 58,000 per year.

Exports of Cotton Textiles

In the last few years the Republic of Korea has become one of the world's major exporters of cotton manufacturers. In 1977 it probably exported more cotton yarn than any country except Greece, Pakistan, and, likely, Turkey. Its export of 25,585 metric tons of cotton fabrics in 1977 was well below exports of a number of other countries, but were still substantial. Korea's exports of cotton made-up goods are rising, but are still small in volume, compared with exports of yarn and fabrics.

In all, it is estimated that exports of cotton in the form of manufactured goods rose from 151,000 bales (32,900 metric tons) in 1970 to 795,000 bales (188,000 tons) in 1977 and to a still higher total in 1978 (table 14). It is unlikely that any other country in these years had so rapid an increase.

Competition from Manmade Fibers. As with the domestic component of the Korean market, consumption of manmade fibers in the manufacture of export goods has gone up much more rapidly than consumption of cotton. Manmade fibers used in making textiles for export are estimated to have risen from 42,000 tons in 1970 to 256,000 tons in 1977, with a further large increase in 1978. Exports of both all manmade fiber goods and blended fabrics have risen rapidly. Cotton's share of the market for both cotton and manmades is much smaller than in

TABLE 14.—ESTIMATED RAW FIBER EQUIVALENT OF EXPORTS OF COTTON AND MANMADE FIBER MANUFACTURERS, REPUBLIC OF KOREA, 1965, 1970-78

Calendar year	Cotton[1]	Manmade fiber[2]	Total	Cotton	Manmade	Total
	1,000 bales	*1,000 metric tons*		*Percent*		
1965	84.5	18.4	3.5	21.9	84.0	16.0	100.0
1970	151.1	32.9	42.1	75.0	43.9	56.1	100.0
1971	262.7	57.2	62.3	119.5	47.9	52.1	100.0
1972	316.5	68.9	63.4	132.2	52.1	47.9	100.0
1973	316.4	81.4	167.9	249.3	32.7	67.3	100.0
1974	451.9	98.4	145.0	243.4	40.4	59.6	100.0
1975	480.0	104.5	190.0	294.5	35.5	64.5	100.0
1976	724.3	157.7	239.4	397.1	39.7	60.3	100.0
1977	795.5	173.2	256.3	429.5	40.3	59.7	100.0
1978[3]	862.6	187.8	315.5	503.3	37.3	62.7	100.0

[1] Mill consumption in manufacture of export products plus imports of cotton yarn and fabrics assumed to have also been used in manufacture of export products. [2] Calculated from exports of synthetic fabrics, knit goods, lace, twine, cable, ropes, sacks, bagging, clothing, and other. The latter two items were calculated as having same proportion of manmade fibers as mill consumption in South Korea after export of yarn, fabrics, and other items just listed. [3] January-June X 2.

Source: Based on data in *Cotton Textile*, monthly, Spinners and Weavers Association of Korea.

the 1960's, declining from 84 percent in 1965 to 44 percent in 1970 and 39 percent during 1976-78.

Consumption of cotton and manmade staple fibers in the manufacture of exported textiles is given in table 15. This table does not include consumption of manmade continuous filament yarn, which by its nature is not spun on textile machinery.

Kind of Cotton Goods Exported. In 1976, yarn accounted for 49 percent of the exports of cotton manufactures; fabrics, 46 percent; and made-up goods, 5 percent. Korea is thus primarily an exporter of goods in process that require further manufacture elsewhere (table 16).

Exports of cotton yarn multiplied ninefold from 1970 to 1978. Practically all of the cotton yarn exported was pure cotton. Exports of blended, part-cotton yarns remain small.

All-cotton fabric exports rose from 1970 to 1972, but then they receded and were scarcely larger in 1976 than in 1970. They accounted for over half of the exports of cotton manufacturers in 1970 but less than 20 percent in 1976. On the other hand, exports of part-cotton, blended fabrics quadrupled and their share rose from 18 to 27 percent. Such goods, although only part cotton, are becoming a significant component of cotton offtake.

Markets for Korean Cotton Manufactures. Japan was formerly the largest export market for South Korean cotton manufactures, taking around one-fourth of the total to all destinations in both 1970 and 1976. Japan is primarily a buyer of cotton yarn, accounting for 40 percent of South Korea's export of this product.

The record import of South Korean cotton yarn by Japan in 1978 was the subject of a joint meeting of the spinners' organizations of the two countries in September 1978, but no action was taken on the matter. Japan also takes nearly 20 percent of Korea's exports of cotton made-up goods and a smaller proportion of its fabric exports.

Hong Kong replaced Japan as the largest buyer of South Korean cotton textiles in 1976, taking 30 percent of total exports compared with 17 percent in 1970. Like Japan, Hong Kong is a heavy buyer of all-cotton yarn; exports shot from 2,400 tons in 1970 to 180,000 tons in 1976 and a like amount in 1977. In 1976 Hong Kong was also the destination of 10 percent of Korea's exports of all-cotton fabrics, 15 percent of the part-cotton fabrics, and as might be expected, very little of its made-up goods. Obviously, Hong Kong imports yarn and fabric from South Korea, processes it further, and largely exports the finished product. Hong Kong's relatively large import quotas into the United States and Western Europe may be important in this connection. However, since Hong Kong is a free port, Korean textiles have no difficulty entering.

The United States took 12 percent directly of South Korea's exports of cotton manufactures in 1970 and only 7 percent in 1976. The United States imports practically no cotton yarn from South Korea, but takes 14 percent of its all-cotton-fabric exports, and 9 percent of its part-cotton fabrics. The United States, however, is the largest buyer of made-up goods, which accounted for 38 percent of the volume in 1976. By far the largest item in this category was

TABLE 15.–MILL CONSUMPTION OF TEXTILE FIBERS IN MANUFACTURE OF EXPORT PRODUCTS IN MILLS THAT ARE MEMBERS OF THE SPINNERS AND WEAVERS ASSOCIATION OF KOREA

Calendar year	Cotton	Rayon and acetate	Synthetic	Total	Cotton	Rayon and acetate	Synthetic	Total
	Metric tons				*Percent*			
1970	30,756	442	2,285	33,483	91.8	13.2	6.8	100.0
1971	55,111	849	5,458	61,418	89.7	1.4	8.9	100.0
1972	65,595	1,261	12,027	78,883	83.2	1.6	15.2	100.0
1973	70,882	1,481	18,653	91,016	77.9	1.6	20.5	100.0
1974	92,261	1,506	12,337	106,104	87.0	1.4	11.6	100.0
1975	99,995	1,725	26,968	128,688	77.7	1.3	21.0	100.0
1976	150,616	4,691	35,533	190,840	78.9	2.5	18.6	100.0
1977	163,034	12,146	42,617	217,797	74.8	5.6	19.6	100.0
1978[1]	179,932	8,736	55,044	243,712	73.8	3.6	22.6	100.0
1978[2]	196,000	–	–	–	–	–	–	–
1979[2]	240,000	–	–	–	–	–	–	–

[1] January-June total X 2. [2] Plan.

Source: *Cotton Textile,* monthly of Spinners and Weavers Association of Korea and from brochure dated November 16, 1978 of this organization. This table does not take acount of consumption of continuous filament manmade fiber yarn or of consumption of wool, silk, and other fibers.

TABLE 16.–EXPORTS OF COTTON YARN, FABRICS, AND MADE-UP GOODS BY REPUBLIC OF KOREA, 1970-77

(In thousand square yards[1])

Item	1970	1971	1972	1973	1974	1975	1976	1977
Totals of items shown below:								
Yarn, all cotton	46,716	150,627	130,841	92,958	260,534	230,941	360,465	391,730
Yarn, part cotton	3,922	2,656	6,128	6,058	13,934	5,341	5,603	26,786
Fabrics, all cotton	124,170	162,209	176,542	166,629	163,073	136,382	136,116	–
Fabrics, part cotton	42,201	50,381	67,951	72,145	80,827	125,442	198,500	–
Made-up goods	17,940	16,983	20,047	35,262	24,368	31,247	32,172	–
United States								
Yarn, all cotton	0	0	0	0	23	0	0	106
Yarn, part cotton	0	0	0	0	0	0	0	1,133
Fabrics, all cotton	20,333	24,228	26,322	13,174	20,908	29,642	19,267	–
Fabrics, part cotton	0	0	0	108	564	3,674	18,514	–
Made-up goods	8,599	8,430	9,278	5,499	4,676	11,595	12,125	–
Canada								
Yarn, all cotton	0	19	65	12	120	94	28	65
Yarn, part cotton	0	293	0	0	0	0	0	1,068
Fabrics, all cotton	2,965	3,100	1,723	176	2,683	1,477	3,110	–
Fabrics, part cotton	1	0	0	0	0	0	458	–
Made-up goods	2,678	3,242	3,178	552	276	1,074	2,303	–
Latin America								
Yarn, all cotton	3	60	237	86	0	55	17	51
Yarn, part cotton	0	0	0	0	0	0	0	0
Fabrics, all cotton	0	0	20	12	8	16	333	–
Fabrics, part cotton	196	348	139	19	131	0	467	–
Made-up goods	652	1,009	331	170	74	332	165	–
Japan								
Yarn, all cotton	33,284	136,414	113,204	76,249	142,704	98,319	141,050	176,631
Yarn, part cotton	1,386	1,807	368	3,339	3,180	1,380	235	150
Fabrics, all cotton	15,955	31,776	75,583	85,386	21,947	18,022	12,291	–
Fabrics, part cotton	2,301	158	6,758	29,119	27,847	25,370	29,087	–
Made-up goods	623	698	3,299	24,203	11,091	6,336	5,658	–
Hong Kong								
Yarn, all cotton	2,401	2,048	547	4,667	30,345	105,338	180,347	178,312
Yarn, part cotton	643	386	46	258	258	519	615	2,350
Fabrics, all cotton	7,716	16,969	16,462	7,655	8,391	7,688	13,375	–
Fabrics, part cotton	28,821	41,018	36,374	15,759	31,392	26,612	28,986	–
Made-up goods	0	0	183	83	238	286	69	–
Other Far East								
Yarn, all cotton	5,307	7,776	13,643	10,977	59,870	21,680	30,198	20,171
Yarn, part cotton	1,893	170	5,308	1,375	8,933	4,210	1,172	7,623
Fabrics, all cotton	2,396	1,016	3,577	2,157	20,136	1,407	4,194	–
Fabrics, part cotton	66	2,349	5,736	5,235	3,009	11,777	15,088	–
Made-up goods	16	18	39	101	2,562	1,296	1,409	–
EC								
Yarn, all cotton	5,255	72	1,316	664	20,677	9,270	4,098	7,613
Yarn, part cotton	0	0	0	0	1,551	291	2,707	1,240
Fabrics, all cotton	42,824	58,521	46,011	53,479	72,787	55,744	53,785	–
Fabrics, part cotton	10,168	6,455	18,094	18,576	15,134	52,021	94,905	–
Made-up goods	918	2,548	3,365	4,136	4,396	5,953	7,122	–

See footnote at end of table.

TABLE 16.–EXPORTS OF COTTON YARN, FABRICS, AND MADE-UP GOODS BY REPUBLIC OF KOREA, 1970-77–Continued

(In thousand square yards[1])

Item	1970	1971	1972	1973	1974	1975	1976	1977
Other Western Europe								
Yarn, all cotton	0	0	0	0	848	1,096	303	687
Yarn, part cotton	0	0	0	0	12	0	0	13,019
Fabrics, all cotton	322	373	6,544	3,641	14,611	10,990	31,100	–
Fabrics, part cotton	648	53	444	2,243	2,750	2,057	10,739	–
Made-up goods	11	47	58	162	583	1,492	2,012	–
All Other Countries								
Yarn, all cotton	466	4,238	1,829	303	5,947	2,234	3,119	8,094
Yarn, part cotton	0	0	406	1,086	0	1,462	566	203
Fabrics, all cotton	31,662	17,796	300	949	1,602	5,083	3,313	–
Fabrics, part cotton	77	142	101	668	410	6,663	7,799	–
Made-up goods	4,969	992	316	356	472	1,608	1,311	–

[1] Yarn and make-up goods converted at 4.6 square yards per pound.

towels. A considerable additional volume of yarn and fabric produced in South Korea may eventually also arrive in the United States after further processing in such countries as Hong Kong and Japan.

South Korea exports little yarn to Western Europe, although there was a sudden, large export of part-cotton yarn to Austria in 1977. Western Europe, however, is the major market for Korean cotton fabric exports, taking well over half of total exports.

Next to the United States, Western Europe is the largest buyer of made-up goods from South Korea, taking over one-fourth of total exports. The volume, though gradually rising, is small compared with sales of cotton fabrics. EC imports of all-cotton fabrics have not increased much–from 43,000 tons in 1970 to 54,000 in 1976–although shipments there of part-cotton fabrics increased ninefold from 1970 to 1976. The 95,000 tons exported in the latter year to the EC accounted for nearly half of total Korean exports of this product. The European Community also took 7,000 tons of made-up goods. It is difficult to single out particular countries in the EC as larger markets than others. All appeared to be substantial buyers.

Exports of cotton and part-cotton fabrics to non-EC countries in Western Europe also rose dramatically in the 1970's. From close to zero in 1970, exports of all-cotton fabrics went to 31,000 tons, and of part-cotton fabrics to nearly 11,000 tons in 1976. Sweden and Finland accounted for much of the volume.

Exports of cotton and part-cotton yarn and fabrics to countries in the Far East other than Japan and Hong Kong rose rapidly from 1970 to 1974, but have declined considerably since then. Shipments to this area accounted for 7 percent of South Korea's export volume in 1976. The fall-off is largely because of decreased sales to Indonesia, Bangladesh, and Sri Lanka. Taiwan, Singapore, Australia, and sometimes Burma remain substantial buyers.

Elsewhere in the world, Saudia Arabia and Iran have become moderate-sized markets for Korean textiles and small quantities go to a large number of other countries in western Asia and Africa. Poland, in 1975 and 1976, and the German Democratic Republic in 1976, bought small quantities of yarn and fabric; these were the only sales to centrally planned countries.

Prospective Future Markets. As noted earlier, the Republic of Korea has one of the most efficient textile industries in the world. The industry has large, modern units and an efficient work force, and labor costs per unit of product are relatively low. Average monthly wages in the textile industry rose from $38 in 1971 to $125 at the end of 1976, but labor productivity rose 64 percent during the same period. With other employment opportunities increasing, Korea's textile wages no doubt will continue to rise, but even then it is difficult to think of any other countries that might be able to rival South Korea in terms of cost-per-unit of output for several years to come. Other countries now have lower wages but do not rival South Korea in efficiency.

China obviously has great potential as a competitor in textiles, particularly since it can set export prices by fiat. But it also has a huge population in need of additional textiles, and may be disadvantaged by Government ownership and the question of

whether its mills can respond rapidly and precisely to the demands of the international textile market.

South Korea as yet supplies very little of world trade in cotton textiles. In 1976 the major exporting countries exported 525,000 metric tons of cotton yarn, of which only 40,000 came from the Republic of Korea.[5] In 1976, the major exporters of cotton fabrics exported 893,000 tons of such fabrics, of which 42,000 came from South Korea. Thus, Korean textiles still have worlds to conquer.

Much of the world trade in textiles is now controlled by bilateral agreements between exporting and importing countries. These agreements conform to provisions of the international Multi-Fiber Arrangement (MFA) concluded under the General Agreement on Tariffs and Trade (GATT). Importing countries belonging to the MFA generally cannot impose quotas on imports unless their markets are disrupted, and if they impose quotas they must allow a gradual rise from year to year and abandon the quota if the imports are no longer a problem.

Imports of Korean textiles by the United States have been controlled by bilateral agreements for several years. The current agreement, signed on December 23, 1977, calls for limitations on imports of "yarn, fabrics, made-up and miscellaneous cotton, and manmade products" of 6.6 percent each year, which, compounded, would allow 29 percent greater imports in 1983 than in 1979.

EC imports of Korean textiles are also limited by negotiations concluded in December 1977. Although the import quotas for 1978 have been published, it is difficult to determine how they will influence South Korea's exports. The MFA usually requires an overall growth rate of at least 6 percent annually, but a smaller rate can be allowed for more sensitive items. The EC is particularly anxious to hold down its total imports of cotton yarn, cotton cloth, and a few other items, while allowing a rise of over 6 percent in other categories, such as some types of apparel.

Canada and South Korea reached an agreement in April 1978 that small increases in South Korea's exports to Canada will be allowed from 1979 through 1981.

There are many other limitations on the international movement of textiles, including tariffs and exchange limitations in many countries, state trading, and quotas in countries other than those just mentioned. The general effect is that Korea's textile exports to the developed countries will be allowed to expand at a moderate rate in the future with perhaps a slower rate of growth for cotton textiles.

South Korea is attempting at present to increase the number of countries it supplies. Its markets in such areas as the Middle East, Africa, and Latin America are as yet very limited; import restrictions and the desire to encourage their own textile industries, to make such expansion a difficult enterprise. South Korea also is attempting to diversify its output and to increase its production of high-quality, high-style products.

Importance of Textile Exports to the Korean Economy. South Korea's export of textiles and clothing (including raw silk and raw manmade fibers) rose in value from $1,526 million in 1974 to $2,811 million in 1977 and an annual rate of $3,224 million in the first half of 1978. These items accounted for 34 percent of South Korea's total exports in 1978 and 28 percent in 1977.[6]

In 1974, South Korea ranked fifth (in value) as an exporter of textiles and apparel, behind the EC, Japan, Hong Kong, and the United States. By 1977, it was fourth, having passed the United States. Deducting imports of textiles from exports to obtain a net trade balance for textiles and clothing, the Republic of Korea's positive balance of $2,262 million in 1977 was exceeded by only one country, Japan.[7]

Imports of Korean Textiles and Apparel. U.S. imports of Korean cotton manufactures comprised around 4 percent of total U.S. imports of such products and 14 percent of aggregate U.S. imports of cotton, wool, and manmade fiber manufactures from that country (table 17). Imports of manmade fiber products, some of which contain a partial cotton content, were much more important. They comprised 83 percent of the total for all U.S. imports of the aforementioned fiber products from South Korea and about 14 percent of total U.S. imports of manmade fiber products. (These figures are based on equivalent square-yard data.)

Korea's Manmade Fiber Industry

South Korea has had one of the most rapidly expanding manmade fiber industries in the world in the 1970's. Production rose eightfold between 1970 and 1978 (tables 18 and 19). Even so, Korea had only 3 percent of the world's production in 1977. Further substantial expansion is reported to be taking place under the pressure of what the *Japan Textile News*

[5] *Quarterly Statistical Bulletin* of International Cotton Advisory Committee, October 1978.

[6] *Cotton Textile* (monthly), Spinners and Weavers Association of Korea, September-October 1978, pages 10 and 11, and *Monthly Statistics of Korea,* Economic Planning Board, June 1978.

[7] Compiled from data in *"Recent Trends in Production and Trade in Textiles and Clothing."* Textiles Committee on GATT, October 18, 1978, and *International Financial Statistics,* International Monetary Fund, December 1978.

TABLE 17.–IMPORTS OF FIBER MANUFACTURES INTO THE UNITED STATES FROM SOUTH KOREA AND ALL COUNTRIES, 1974-78[1]

Fiber and country	1974	1975	1976	1977	1978 Jan-Aug
Cotton					
South Korea, Mil. Sq. Yds.	44	48	88	74	59
All countries, Mil. Sq. Yds.	1,463	1,280	1,956	1,656	1,541
Percent from South Korea	3.0	3.8	4.5	4.5	3.8
Wool					
South Korea, Mil. Sq. Yds.	10	12	15	18	12
All countries, Mil. Sq. Yds.	86	79	106	198	129
Percent from South Korea	11.6	15.2	14.2	9.1	9.3
Man-made Fibers[2]					
South Korea, Mil. Sq. Yds.	305	380	507	441	327
All countries, Mil. Sq. Yds.	2,862	2,468	3,076	3,222	2,467
Percent from South Korea	10.7	15.4	16.5	13.7	13.3
Total					
South Korea, Mil. Sq. Yds.	359	440	610	533	398
All countries, Mil. Sq. Yds.	4,411	3,827	5,138	5,076	4,127
Percent from South Korea	8.1	11.5	11.9	10.5	9.6

[1] Including yarn, apparel and other nonfabric items converted to a square yard basis. [2] Includes mostly manmade fiber but part-cotton products.

Source: Compiled from U.S. Import Statistics as given in *Textile Import Trends*, published by the American Textile Manufacturers Institute.

TABLE 18.–PRODUCTION, IMPORTS, AND EXPORTS OF MANMADE FIBERS IN THE REPUBLIC OF KOREA

(1,000 metric tons)

Year	Production							Imports	Exports	Balance
	Rayon and acetate			Noncellulosic fibers			Total			
	Yarn	Staple	Subtotal	Yarn	Staple	Subtotal				
1964	0	0	0	2.4	0.7	3.1	3.1	31.8	–	34.9
1970	6.9	0	6.9	24.2	21.8	46.0	52.9	51.4	3.7	100.6
1971	7.4	0	7.4	39.9	21.7	61.6	69.0	49.9	7.6	111.3
1972	8.1	0	8.1	49.5	32.1	81.6	89.7	51.3	7.7	133.3
1973	7.7	0	7.7	66.8	48.9	115.7	159.4	76.7	8.0	228.1
1974	9.6	0	9.6	82.6	69.1	151.7	161.3	43.4	10.6	194.1
1975	9.8	0	9.8	120.0	142.7	262.7	272.5	32.8	33.3	272.0
1976	14.2	7.1	21.3	141.3	168.0	309.3	330.6	35.0	23.2	342.4
1977	12.8	9.7	22.5	162.5	187.4	349.9	372.4	55.5	43.9	384.0
1978[1]	12.7	12.3	30.0	185.0	217.0	402.0	432.0	–	–	445.0
Producing capacity[2]										
1978	17.0	10.2	27.2	178.0	208.0	386.0	413.2	–	–	–
1979	21.5	28.1	49.6	200.0	226.0	426.0	475.6	–	–	–

[1] Based on first 5 months of 1978. [2] March 1978 and December 1979.

Source: Compiled from *Textile Organon*, June 1978 and earlier issues.

TABLE 19.–EXPANSION OF SYNTHETIC FIBER INDUSTRY IN REPUBLIC OF KOREA, 1973-78

(Tons per day capacity)

Calendar year	Polyester filament yarn	Polyester staple fiber	Nylon filament yarn	Acrylic staple fiber	Others	Total
1973	58.0	20.0	86.6	88.5	68.7	321.8
1974	91.0	200.0	116.1	158.5	78.7	644.3
1975	121.0	200.0	135.1	223.5	113.7	793.3
1976	151.0	230.0	153.1	223.5	108.7	866.3
1977	153.0	230.0	206.4	249.5	139.5	978.4
1978[1]	228.0	230.0	212.4	275.5	144.5	1,090.4
1978[2]	308.0	290.0	287.4	345.5	226.5	1,457.4

[1] August 31, 1978. [2] Including capacity under construction.

Source: *Japan Textile News,* November 1978, Page 28.

(November 1978) said was the "ever rising textile demand of the world market."

About 40 percent of South Korea's production of manmade fibers consists of polyester fiber, half of which is continuous filament yarn and half staple fiber. The latter is almost entirely used on cotton-system spindles and is frequently blended with cotton.

Acrylic fiber, largely used for sweaters and other wool-type products, constitutes nearly 30 percent of total production. Nylon yarn represents about 23 percent. There is a limited production of viscose and acetate, polypropylene, and nylon staple. Some expansion apparently is going on in all of these products.

Synthetic fibers have been made from intermediates purchased in Japan, the United States, and sometimes Europe. Korea was expected to have its own production of these chemicals in 1979.

Korea's synthetic fiber industries have enjoyed a better competitive position than their counterparts elsewhere, because almost all of their product is converted into textiles and apparel before being exported. As the country's textile and clothing industries are highly efficient, their manmade fiber producers have an advantage. Some manmade fibers are still being imported, probably of types not available, or of limited availability, in South Korea. Polyester staple fiber was selling for export at 50 cents per pound in South Korea in 1977, well below the price of cotton. The domestic price, however, was 70 cents per pound, while the price of rayon staple was 72 cents.

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